

OIB - Other: NOAA P-3 05/04/16 Science Report

Aircraft:

Other: NOAA P-3

Date:

Wednesday, May 4, 2016

Mission:

OIB

Mission Location:

Arctic Ocean

Mission Summary:

OIB flew the South Canada Basin sea ice mission. This mission enhances the sampling in the large region between the Laxon Line and South Basin Transect. The beginning portion of the line was heavily consolidated sea ice with no leads spotted until about 30 minutes into the flight, then sporadically thereafter. This campaign the ATM team installed a new mechanism to control the laser power in flight from their operating station. As we passed over some of the larger leads the team members quickly increased the laser power to mitigate data drop outs, though this may saturate waveforms over snow-covered ice near the leads. This will be very beneficial for the flight since there were fewer leads and the narrow scan ATM laser is not onboard. The first leg of the line was flown under clear skies, but thick clouds were encountered along the southwest part of the line of the second leg.

DMS lost about 15 minutes of data due to camera lock at end of the flight line (in clear air portion). A ramp pass was conducted but under cloudy conditions.

Data volumes:

ATM: 30 Gb some window contamination probable later in flight

FLIR: 4 Gb

DMS: 84 Gb (15 minutes of lost data due to camera problem, plus 1 hr of clouds)

Ku-Band Radar: 144 Gb

MCoRDS: 123 Tb, experimental sea ice data collection

Snow Radar: 144 Gb

BESST: (system error caused loss of data collection 17 minutes after time on)

Total data collection time: 7.1 hrs, 70% lidar coverage

Submitted by:

Nathan T. Kurtz on 05/04/16

File:

 [siscanadabasin.pdf](#)

Related Flight Report:

Other: NOAA P-3 05/04/16

Flight Number:

Sea Ice South Canada Basin

Payload Configuration:

OIB Spring 2016

Nav Data Collected:

No

Total Flight Time:

7.9 hours

Submitted by:

John Woods on 05/04/16

Flight Segments:

From:	BGTL	To:	BGTL
Start:	05/04/16 10:49 Z	Finish:	05/04/16 18:42 Z
Flight Time:	7.9 hours		
Log Number:	16M030	PI:	Nathan Kurtz
Funding Source:	Bruce Tagg - NASA - SMD - ESD Airborne Science Program		
Purpose of Flight:	Science		

Flight Hour Summary:

	16M030
Flight Hours Approved in SOFRS	200
Total Used	148.7
Total Remaining	51.3

16M030 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining
03/22/16	ICF1	Check	2	2	198
03/23/16	ICF2	Check	3.4	5.4	194.6
04/12/16	ICF3	Check	1.3	6.7	193.3
04/15/16	Repo 1	Ferry	0.5	7.2	192.8
04/16/16	Repo 2	Ferry	2.9	10.1	189.9
04/18/16	Repo 3	Ferry	7.1	17.2	182.8
04/19/16	Sea Ice Eureka	Science	7.3	24.5	175.5
04/20/16	Sea Ice Laxon Line	Science	8.7	33.2	166.8
04/21/16 - 04/22/16	Sea Ice SIZRS Zigzag	Science	8.3	41.5	158.5
04/30/16	Sea Ice South Basin Transect	Science	8.8	50.3	149.7
05/03/16	Sea Ice North Pole Transect	Science	7.6	57.9	142.1
05/04/16	Sea Ice South Canada Basin	Science	7.9	65.8	134.2
05/09/16	Land Ice Zachariae-79N	Science	7.6	73.4	126.6
05/10/16	Land Ice Northwest Coastal A	Science	6	79.4	120.6
05/11/16	Land Ice Umanaq B	Science	7.1	86.5	113.5
05/12/16	Land Ice Southeast Coastal	Science	7.3	93.8	106.2
05/13/16	Land Ice Helheim-Kangerdlugssuaq	Science	7.8	101.6	98.4
05/14/16	Land Ice SW Coastal A	Science	7.8	109.4	90.6
05/16/16	Land Ice Thomas-Jakobshavn 01	Science	7.9	117.3	82.7
05/17/16	Land Ice Helheim-Kangerdlugssuaq Gap B	Science	8.1	125.4	74.6
05/18/16	Land Ice IceSat-2 Central	Science	7.7	133.1	66.9
05/19/16	Land Ice East Glaciers 01	Science	7.1	140.2	59.8
05/21/16	Ferry BGSF_KMCF	Ferry	8.5	148.7	51.3

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

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Page Last Updated: April 22,
2017

Page Editor: Erin Justice

NASA Official: Bruce A.

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